REMARKS

Applicants express their gratitude for the interview with Examiner Lo on January 8, 2009. The Examiner's time and consideration is greatly appreciated.

Claims 1-23 are currently pending in the application. Claims 1-3, 5-6, 8-16, 19-23 were rejected under 35 U.S.C. 103(a) over Hollander (U.S. Patent Application Publication 2002/0073375 A1) in view of Botala (U.S. Patent No. 6,868,513 B1). Claims 4 and 7 were rejected under 35 U.S.C. 103(a) over Hollander and Botala in further view of National Instruments ("Matrix Switch Expansion Guide"). Claims 17-18 were rejected under 35 U.S.C. 103(a) over Hollander and Botala in further view of Schauss (U.S. Patent No. 5,181,201). With entry of this amendment, Applicants amend claim 1.

Claim 1 is the only pending claim in independent form. Claim 1 is rejected under 35 U.S.C. 103(a) over Hollander in view of Botala. In response to the Examiner's recommendation made during the January 8, 2009 interview, Applicants amend claim 1 to clarify the claimed invention. As amended, claim 1 recites, in part:

> wherein each *test module includes hardware and software components supplied by a vendor of the test module* for applying a test to the IC, wherein the software component of each test module comprises *a compiler specific to the test module for generating test pattern data specific to the test module* to be loaded on the corresponding hardware component of the test module.

(Emphasis added.) Support for the amendment can be found throughout the specification, for example, in paragraph [0017] of the published application. Specifically, claim 1 is amended to clarify that the hardware and software components of the test module are supplied by the vendor the test module and, more importantly, the compiler in the software component is specific to the test module and for generating test pattern data specific to the test module.

Applicants respectfully submit that the combination of Holland and Botala fails to disclose this recitation of amended claim 1. The Examiner correctly points out that Hollander fails to teach or suggest that each vendor-specific software module comprises a module-specific compiler. (See Office action, page 3, first paragraph.) Botala is cited for the elements of claim 1

not found in Holland. However, Botala also fails to disclose, at least, "test module [including] hardware and software components supplied by a vendor of the test module" or "the software component of each test module [comprising] a compiler specific to the test module for generating test pattern data specific to the test module," as required by amended claim 1.

Botala describes a method for automatically generating a test environment for testing a plurality of devices under test (DUTs). The multiple devices are tested by mapping the plurality of DUTs into pins of the tester system to create pin data. Pattern data, generic test program rules and the pin data are input into a test program generator, which generates a multi-DUT test program. (Abstract). Essentially, Botala discloses a method to generate a test program to test multiple DUTs simultaneously. (See claim 1 of Botala.)

In particular, Botala discloses Test Program Generator software 2 that reads device-specific Pin Data 4 and other data to generate a device-specific multi-DUT Test Program 14. It is important to note that the *device-specific* Pin Data is *specific to the DUTs* (devices under test). (See abstract.) Accordingly, the *device-specific* multi-DUT Test Program 14 is also *specific to the DUTs being tested*, and not the test module testing the DUTs. In fact, Betala specifically states "this allows for multi-DUT testing to be implemented on virtually *any tester* whether or not that tester provides any kind of multi-DUT support." (Emphasis added, col. 1, lns. 63-65) That is, any tester (i.e., test module) would work with Betala's method.

In contrast, the present invention, as recited in amended claim 1, requires hardware and software components *specific to a test module* (108 in Fig. 2) that tests the DUTs (112 in Fig. 2) (i.e., not specific to the DUTs). In addition, as recited in claim 1, the software component includes a compiler *specific to the test module* for generating test pattern data *specific to the test module*. This feature is also not disclosed in Betala.

As described in the background section of the pending application, conventional semiconductor test systems are developed in tester manufacturer's proprietary languages. Under such conventional testing environment, each time a new test module is needed to test a

semiconductor integrated circuit, significant amount of time and engineering resources are required to integrate the new test module into the conventional semiconductor test systems. The ability to integrate *vendor-specific test modules* into the semiconductor test system as described in the pending application addresses this problem in the conventional semiconductor test systems. As such, claim 1 of the present invention and Betala address two completely different problems.

In the Office action, the Examiner relies on column 9, lines 20-30, as disclosing compiling a source file into a module-specific format that loads on the vendor-supplied hardware. (See page 3 of the Action). It appears that the Examiner is relying on the pin data 4 as being equivalent to a vendor-specific software module, as recited in independent claim 1. However, the pin data 4 of Botala does not include a compiler specific to a test module for generating test pattern data specific to the test module. According to the disclosure of Botala, the pin data 4 is merely read into test program generator software 2 (which is *not* supplied by a vendor of the test module), along with the test program generator rules 8 and pattern data 6. The resulting output is the Multi-DUT test program 14. It appears from Botala's disclosure that the program may be compiled at the test program generator software 2, to output the Multi-DUT test program 14. However, as noted above, the test program generator software 2 is not a software component supplied by the vendor of the test module. Thus, any compiling occurring at the test program generator software 2 is not performed by a compiler specific to a test module, as required by independent claim 1.

Therefore, it is respectfully submitted that the cited references, alone or in combination, fail to teach or suggest all of the features of amended claim 1.

The remaining applied references, namely Matrix Switch Expansion Guide and Schauss, are not seen to cure the deficiencies of Hollander and Botala, either alone or in any permissible combination. Accordingly, amended claim 1 is believed to be allowable.

The remaining claims depend from the independent claim and are believed to be allowable for at least the foregoing reasons.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing Docket No. 333772000800. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

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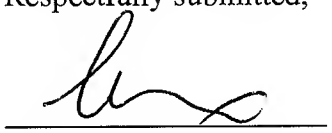
Respectfully submitted,



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